

In the Specification

Replace the paragraph beginning at page 14, line 19, with the following rewritten paragraph:

~~Fig. 4~~ Fig. 3 demonstrates a transcription unit or a gene that has 5 exons: A, B, C, D, and E. There are four alternatively spliced transcripts: transcript 1 (ACD), 2(ACE), 3(BCD), and 4(BCE). This is a more complex scheme but the principle remains the same: An oligo complementary to sequence A or a fragment thereof would be able to only detect transcripts 1 and 2 (hence “ $1+2=A$ ”); an oligo complementary to sequence B would be able to only detect transcripts 3 and 4 (hence “ $3+4=B$ ”); an oligo complementary to sequence D would be able to only detect transcripts 1 and 3 (hence “ $1+3=D$ ”); and an oligo complimentary to sequence E would be able to only detect transcripts 2 and 4 (hence “ $2+4=E$ ”). Therefore, we have a number of oligos that can specifically detect a subset of the splice variants. And, additionally, resolving the four polyvariance equations above would reveal the level of abundance of each splice variant (A, B, D, and E). moreover, an oligo complementary to sequence C or a fragment thereof would be able to detect all four transcripts and thus measure the total level of abundances of these splice variants.

Replace the paragraph beginning at page 15, line 15, with the following rewritten paragraph:

The oligonucleotides of the present invention may be modified at the termini to facilitate their application in a gel-based system or attachment on a chip or array-based system for RNA detection. For example, in one embodiment, the

oligonucleotides are modified at the 5' terminus: A5' C6-amino modification is performed to enable covalent attachment of oligonucleotides on a glass array surface. The carbons function as a spacer and the reactive amine group interacts with aldehydes that are covalently attached to a glass surface. Pre-processed glasses are commercially available from a number of vendors, e.g., ArrayIt.com (<http://arrayit.com>), Corning (<http://www.corning.com>), Clontech (<http://www.clontech.com>). These glasses, and other similar ones, are suitable for oligonucleotide binding and thereby for making oligo arrays using the oligonucleotide libraries according to this invention. The attachment may be covalent or electrostatic, for example. One example is binding of oligos on poly-L-lysine glass, which is electrostatic: poly-L-lysine is positively charged whereas phosphate backbone of DNA is negatively charged. Another example is binding of oligos on aldehyde glass, which is covalent.